



VALVES & REGULATORS

Emerson THR Series

BRAND

Emerson

SKU

RC_PROD_021

CATEGORY

Valves & Regulators



OVERVIEW

The Emerson THR is the top standard frame of the T-Series large-capacity, balanced-port, take-apart expansion valve family, spanning nominally 55 to 85 tons R-22 by cage selection, with complete-valve configurations rated to 100 tons (THR 100HC / THR 100HW100). Above it sits only the TMR variant frame (to 100 tons R-22/R-407C). This is the valve for the largest direct-expansion circuits where a fixed, non-serviceable valve would be a liability. The T-Series proposition scales with tonnage: at 75–100 tons, cutting out and re-brazing a failed valve means crane time, refrigerant recovery, and plant downtime. The THR's take-apart construction converts that into a bolt-off component swap — cage kit, flange, or power assembly — with the body staying in the line. Balanced-port construction and standard external equalization hold superheat stable across the wide pressure differentials these systems see.

KEY FEATURES

Highest-capacity standard frame
of the T-Series (55–100 tons R-22)

Take-apart construction
component-level service on the largest valves, in-line

Balanced port design
for stable superheat control at high pressure differentials

Externally equalized standard
external superheat adjustment

SPECIFICATIONS

PARAMETER	VALUE
MAX. WORKING PRESSURE	450 psig (31 bar)
TORQUE BOLTS	300 in-lbs
CAGE CAPACITIES (R-22 / R-407C)	55 / 75* / 85 tons (*70 tons R-407C)